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AMENDMENTS TO THE CLAIMS

- (Currently Amended) A pharmaceutical composition comprising at least one compound capable of enhancing gap-junction communication, [[and]] at least one nucleoside analogue and a source of deoxyribonucleoside kinase.
- (Withdrawn) The composition of claim 1, wherein said compound capable of enhancing gap-junction communication is an aromatic organic acid, a pharmaceutically acceptable salt or an ester or amide of said acid.
- (Withdrawn) The composition of claim 2, wherein said aromatic organic acid is a compound of the formula:

$$\begin{array}{c} R_{2} \\ | \\ | \\ C - \\ | \\ R_{0} \end{array} \left[\begin{array}{c} R_{3} \\ | \\ C - \\ | \\ R_{4} \end{array} \right] \left[\begin{array}{c} O \\ | \\ C - OH \end{array} \right.$$

wherein R_0 is aryl (e.g., phenyl, napthyl), phenoxy, substituted aryl (e.g., one or more halogen [e.g., F, Cl, Br, I], lower alkyl [e.g., methyl, ethyl, propyl, butyl] or hydroxy substituents) or substituted phenoxy (e.g., one or more halogen [e.g., F, Cl, Br, I], lower alkyl [e.g., methyl, ethyl, propyl, butyl] or hydroxy substituents);

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 R_1 and R_2 are each H, lower alkoxy (e.g., methoxy, ethoxy), lower straight and branched chain alkyl (e.g., methyl, ethyl, propyl, butyl) or halogen (e.g., F, Cl, Br, I);

R₃ and R₄ are each H, lower straight and branched chain alkyl (e.g., methyl, ethyl, propyl, butyl), lower alkoxy (e.g., methoxy, ethoxy) or halogen (e.g., F, Cl, Br, I); and

n is an integer from 0 to 2;

salts thereof (e.g., Na⁺, K⁺ or other pharmaceutically acceptable salts); stereoisomers thereof; and mixtures thereof.

(Withdrawn) The composition of claim 2, wherein R₀=aryl, phenoxy, substituted aryl
or substituted phenoxy;

R1 and R2=H, lower alkoxy, lower straight and branched chain alkyl or halogen;

R₃ and R₄=H, lower alkoxy, lower straight and branched chain alkyl or halogen; and n=an integer from 0 to 2;

salts thereof; stereoisomers thereof; and mixtures thereof.

5. (Withdrawn) The composition of claim 3, wherein said aromatic fatty acid is selected from the group consisting of phenylacetic acid, phenylpropionic acid, phenylbutyric acid, 1naphthylacetic acid, phenoxyacetic acid, phenoxypropionic acid, phenoxybutyric acid, 4chlorophenylacetic acid. 4-chlorophenylbutyric acid, 4-iodophenylacetic acid, iodophenylbutyric acid, α-methylphenylacetic acid, α-methoxyphenylacetic α-hydroxyphenylacetic acid, 4-fluorophenylacetic ethylphenylacetic acid. acid. 4fluorophenylbutyric acid, 2-methylphenylacetic acid, 3-methylphenylacetic acid, 4methylphenylacetic acid. 3-chlorophenylacetic acid, 3-chlorophenylbutyric acid, 2Application No.: 10/588,379 Reply to Office Action of November 16, 2009

chlorophenylacetic acid, 2-chlorophenylbutyric acid and 2,6-dichlorophenylacetic acid, and the

sodium salts of the these compounds.

6. (Withdrawn) The composition of claim 5, wherein the aromatic organic acid is 4-

Phenylbutyrate or a pharmaceutically acceptable prodrug thereof.

7. (Withdrawn) The composition of claim 2, wherein the aromatic organic acid is 2-

Phenylbutyrate or a pharmaceutically acceptable prodrug thereof.

8. (Withdrawn) The composition of claim 5, wherein the aromatic organic acid is

phenylacetic acid or a pharmaceutically acceptable salt or an ester of phenylacetic acid.

9. (Withdrawn) The composition of claim 1, wherein the compound capable of

enhancing gap-junction communication is valproic acid, a pharmaceutically acceptable salt

thereof or a prodrug of valproic acid.

10. (Withdrawn) The composition of claim 1, wherein the compound capable of

enhancing gap-junction communication is splitomicin, a pharmaceutically acceptable salt thereof

or a prodrug of splitomicin.

11. (Withdrawn) The composition of claim 1, wherein the compound capable of

enhancing gap-junction communication is butyric acid, a pharmaceutically acceptable salt

thereof or a prodrug of butyric acid.

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12. (Canceled)

13. (Withdrawn) The composition of claim 12, wherein the source of

deoxyribonucleoside kinase is a gene therapy vector.

14. (Withdrawn) The composition of claim 13, wherein the gene therapy vector is a virus

vector.

15. (Withdrawn) The composition of claim 14, wherein the virus vector is selected from

the group consisting of being a viral vector, in particular a Herpes simplex viral vector, an

adenoviral vector, an adenovirus-associated viral vector, a lentivirus vector, a retroviral vector or

a vacciniaviral vector.

16. (Withdrawn) The composition of claim 15, wherein the source of

deoxyribonucleoside kinase comprises a composition of packaging cells capable of producing an

infective virion comprising said virus vector.

17. (Withdrawn) The composition of claim 13, wherein the gene therapy vector is a

plasmid vector.

18. (Withdrawn) The composition of claim 17, wherein the plasmid vector is selected

from the group consisting of general eukaryotic expression vectors, vectors for stable and

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transient expression and epitag vectors as well as their TOPO derivatives for fast cloning of

desired inserts.

(Withdrawn) The composition of claim 12, wherein the source of 19.

deoxyribonucleoside kinase comprises a protein formulation.

20. (Withdrawn) The composition of claim 19, wherein the protein is formulated as a

liposome composition.

21. (Currently Amended) The composition of claim [[12]] 1, wherein the source of

deoxyribonucleoside kinase comprises a composition of human stem cells genetically engineered

to express a heterologous deoxyribonucleoside kinase.

22. (Original) The composition of claim 21, wherein the stem cells used in a stem cell-

mediated therapy approach originates from the same tissue as the tumor cells or the same growth

layer or alternatively originates from the bone marrow.

23. (Currently Amended) The composition of claim [[12]] 1, wherein the source of

deoxyribonucleoside kinase comprises a composition of human progenitor or precursor cells

genetically engineered to express a heterologous deoxyribonucleoside kinase.

24. (Currently Amended) The composition according to claim [[12]] 1, wherein the

deoxyribonucleoside kinase is selected from the group consisting of

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a deoxyribonucleoside kinase having the amino acid sequence of any of SEO ID No 1 to

17:

a deoxyribonucleoside kinase variant comprising an amino acid sequence having at least

70% sequence identity to any of SEQ ID No 1 to 17; and

a deoxyribonucleoside kinase encoded by a nucleotide sequence capable of hybridising

under conditions of high stringency to a nucleotide sequence encoding any of SEQ ID No 1 to

17.

25. (Previously Presented) The composition of claim 24, wherein the

deoxyribonucleoside kinases comprises a deoxyribonucleoside kinase selected from the group

consisting of

a deoxyribonucleoside kinase having the amino acid sequence of any of SEQ ID NO 1 to

5; and

a deoxyribonucleoside kinase variant comprising an amino acid sequence having at least

70% sequence identity to any of SEO ID No 1 to 5 and having dNK activity.

26. (Previously Presented) The composition according to claim 1, wherein the nucleoside

analogue is selected from the group consisting of aciclovir (9-[2-hydroxy-ethoxy]-methyl-

guanosine), buciclovir, famciclovir, ganciclovir (9-[2-hydroxy-1-(hydroxymethyl)ethoxyl-

methyll-guanosine), penciclovir, valciclovir, trifluorothymidine, AZT (3'-azido-3'-thymidine),

AIU (5'-iodo-5'-amino-2',5'-dideoxyuridine), ara-A (adenosine-arabinoside; Vivarabine), ara-C

(9-beta-D-arabinofuranosylguanine), ara-T. 1-beta-D-(cytidine-arabinoside), ara-G

arabinofuranosyl thymine, 5-ethyl-2'-deoxyuridine, 5-iodo-5'-amino-2,5'-dideoxyuridine, 1-[2-

deoxy-2-fluoro-beta-D-arabino furanosyl]-5-iodouracil, idoxuridine (5-iodo-2'deoxyuridine), fludarabine (2-Fluoroadenine 9-beta-D-Arabinofuranoside), gencitabine, 3'-deoxyadenosine (3dA), 2',3'-dideoxyinosine (ddI), 2',3'-dideoxycytidine (ddC), 2',3'-dideoxythymidine (ddT). 2',3'-dideoxyadenosine (ddA), 2',3'-dideoxyguanosine (ddG), 2-chloro-2'-deoxyadenosine (2CdA), 5-fluorodeoxyuridine, BVaraU ((E)-5-(2-bromovinyl)-1-beta-D-arabinofuranosyluracil), BVDU (5-bromovinyl-deoxyuridine), FIAU (1-(2-deoxy-2-fluoro-beta-D-arabinofuranosyl)-5iodouracil), 3TC (2'-deoxy-3'-thiacytidine), dFdC gemcitabine (2',2'-difluorodeoxycytidine), dFdG (2',2'-difluorodeoxyguanosine), 5-fluorodeoxyuridine (FdUrd), d4T (2',3'didehvdro-3'deoxythymidine), ara-M (6-methoxy purinearabinonucleoside), IudR (5-Jodo-2'deoxyuridine), CaFdA (2-chloro-2-ara-fluoro-deoxyadenosine), ara-U (1-beta-D-arabinofuranosyluracil), FBVAU (E)-5-(2-bromovinyl)-1-(2-deoxy-2-fluoro-beta-D-arabinofuranosyl)uracil, FMAU 1-(2-deoxzy-2-fluoro-beta-D-arabinofuranosyl)-5-methyluracil, FLT 3'-fluoro-2'-deoxythymidine, 5-Br-dUrd 5-bromodeoxyuridine, 5-Cl-dUrd 5-chlorodeoxyuridine, dFdU 2`,2`difluorodeoxyuridine, (-)Carbovir (C-D4G), 2,6-Diamino-ddP (ddDAPR; DAPDDR; 2,6-Diamino-2',3'-dideoxypurine-9-ribofuranoside), 9-(2'-Azido-2',3'-dideoxy-β-D-erythro-pentofuranosyl)adenine (2'-Azido-2',3'-dideoxyadenosine; 2'-N3ddA), 2'FddT (2'-Fluoro-2',3'dideoxy-\(\beta\)-D-erythro-pentofuranosyl)thymine), 2'-N3ddA(\(\beta\)-D-threo) (9-(2'-Azido-2'.3'dideoxy-β-D-threopentofuranosyl)adenine), 3-(3-Oxo-1-propenyl)AZT (3-(3-Oxo-1-propenyl)-3'-azido-3'-deoxythymidine), 3'-Az-5-Cl-ddC (3'-Azido-2',3'-dideoxy-5-chlorocytidine), 3'-N3-(3'-Azido-3'-deoxy-6-azathymidine), 3'-F-4-Thio-ddT (2',3'-Dideoxy-3'-fluoro-4thiothymidine), 3'-F-5-Cl-ddC (2',3'-Dideoxy-3'-fluoro-5-chlorocytidine), 3'-FddA (B-D-Erythro) (9-(3'-Fluoro-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), Uravidine (3'-Azido-2'.3'dideoxyuridine; AzdU), 3'-FddC (3'-Fluoro-2',3'-dideoxycytidine), 3'-F-ddDAPR (2,6-

Diaminopurine-3'-fluoro-2',3'-dideoxyriboside), 3'-FddG (3'-Fluoro-2',3'-dideoxyguanosine), 3'-FddU (3'-Fluoro-2',3'-dideoxyuridine), 3'-Hydroxymethyl-ddC (2',3'-Dideoxy-3'-hydroxymethyl cvtidine; BEA-005), 3'-N3-5-CF3-ddU (3'-Azido-2',3'-dideoxy-5-trifluoromethyluridine), 3'-N3-5-Cvanomethyloxy-ddU (3'-Azido-2'.3'-dideoxy-5-[(cyanomethyl)oxy]uridine), 3'-N3-5-F-ddC (3'-Azido-2',3'-dideoxy-5-fluorocytidine), 3'-N3-5-Me-ddC (CS-92; 3'-Azido-2',3'-dideoxy-5methylcytidine), 3'-N3-5-NH2-ddU (3'-Azido-2',3'-dideoxy-5-aminouridine), 3'-N3-5-NHMeddU (3'-Azido-2',3'-dideoxy-5-methyaminouridine), 3'-N3-5-NMe2-ddU (3'-Azido-2',3'-dideoxy-5-dimethylaminouridine), 3'-N3-5-OH-ddU (3'-Azido-2',3'-dideoxy-5-hydroxyuridine), 3'-N3-5-SCN-ddU (3'-Azido-2',3'-dideoxy-5-thiocyanatouridine), 3'-N3-ddA (9-(3'-Azido-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), 3'-N3-ddC (CS-91; 3'-Azido-2',3'-dideoxycytidine), 3'-N3ddG (AZG; 3'-Azido-2',3'-dideoxyguanosine), 3'-N3-N4-5-diMe-ddC (3'-Azido-2',3'-dideoxy-N4--5-dimethylcytidine), 3'-N3-N4-OH-5-Me-ddC (3'-Azido-2',3'-dideoxy-N4-OH-5methylcytidine), 4'-Az-3'-dT (4'-Azido-3'-deoxythymidine), 4'-Az-5CldU (4'-Azido-5-chloro-2'deoxyuridine), 4'-AzdA (4'-Azido-2'-deoxyadenosine), 4'-AzdC (4'-Azido-2'-deoxycytidine), 4'-AzdG (4'-Azido-2'-deoxyguanosine), 4'-AzdI (4'-Azido-2'-deoxyinosine), 4'-AzdU (4'-Azido-2'deoxyuridine), 4'-Azidothymidine (4'-Azido-2'-deoxy-.beta.-D-erythro-pentofuranosyl-5-methyl-2.4-dioxopyrimidine), 4'-CN-T (4'-Cyanothymidine), 5-Et-ddC (2',3'-Dideoxy-5-ethylcytidine), 5-F-ddC (5-Fluoro-2',3'-dideoxycytidine), 6Cl-ddP (D2ClP; 6-Chloro-ddP; CPDDR; 6-Chloro-9-(2.3-dideoxy-.beta.-D-glyceropentofuranosyl)-9H-purine), 935U83 (2',3'-Dideoxy-3'-fluoro-5chlorouridine: 5-Chloro-2'.3'-dideoxy-3'-fluorouridine: FddClU; Raluridine), AZddBrU (3'-N3-5-Br-ddU; 3'-Azido-2',3'-dideoxy-5-bromouridine), AzddClU; AzddClUrd (3'-Azido-5-chloro-2'.3'-dideoxyuridine), AZddEtU (3'-N3-5-EtddU; CS-85; 3'-Azido-2',3'-dideoxy-5-ethyluridine), AZddFU (3'-Azido-2',3'-dideoxy-5-fluorouridine), AZddIU (3'-N3-5-I-ddU; 3'-Azido-2',3'-

dideoxy-5-iodouridine), AZT-2,5'-anhydro (2,5'-Anhydro-3'-azido-3'-deoxythymidine), AZT-a-L (α-L-AZT), AZU-2.5'-anhydro (2.5'-Anhydro-3'-azido-2',3'-dideoxyuridine), C-analog of 3'-(3'-Azido-2',3'-dideoxy-5-aza-6-deazauridine). D2SMeP N3-ddU (9-(2.3-Dideoxy-B-Dribofuranosyl)-6-(methylthio)purine), D4A (2',3'-Dideoxydidehydroadenosine), D4C (2',3'-Didehydro-3'-deoxycytidine), D4DAP (2,6-Diaminopurine-2',3'-dideoxydidehydroriboside; ddeDAPR), D4FC (D-D4FC; 2',3'-Didehydro-2',3'-dideoxy-5-fluorocytidine), D4G (2',3'-Didehydro-2',3'-dideoxyguanosine), DMAPDDR (N-6-dimethyl ddA; 6-Dimethylaminopurine-2',3'-dideoxyriboside), dOTC (-) ((-)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTC (+) ((+)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTFC (-) ((-)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), dOTFC (+) ((+)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), DXG ((-)-β-Dioxolane-G), DXC-α-L-(α-L-Dioxalane-C). FddBrU (2'.3'-Dideoxy-3'-fluoro-5-bromouridine), FddIU (3'-Fluoro-2',3'dideoxy-5-iodouridine), FddT (Alovudine; 3'-FddT; FddThD; 3'-FLT; FLT), FTC (Emtricitabine; Coviracil; (-)-FTC; (-)-2',3'-Dideoxy-5-fluoro-3'-thiacytidine), FTC-α-L- (α-L-FTC), L-D4A (L-2',3'-Didehydro-2',3'-dideoxyadenosine), L-D4FC (L-2',3'-Didehydro-2',3'dideoxy-5-fluorocytidine), L-D4I (L-2',3'-Didehydro-2',3'-dideoxyinosine), L-D4G (L-2',3'-Didehydro-2',3'-Dide Didehydro-2',3'-deoxyguanosine), L-FddC (B-L-5F-ddC), Lodenosine (F-ddA; 2'-FddA (B-D-2'-F-dd-ara-A: 9-(2'-Fluoro-2',3'-dideoxy-B-D-threopentafuranosyl)adenine), threo): MeAZddIsoC (5-Methyl-3'-azido-2',3'-dideoxyisocytidine), N6-Et-ddA (N-Ethyl-2',3'dideoxyadenosine), N-6-methyl ddA (N6-Methyl-2',3'-dideoxyadenosine) or RO31-6840 (1-(2'.3'-Dideoxy-2'-fluoro-β-D-threo-pentofuranosyl)cytosine).

27. (Previously Presented) The composition according to claim 1, wherein the nucleoside analog is cytidine analog, a guanosine analog or an adenosine selected from the group consisting

of dFdC gemcitabine (2',2'-difluorodeoxycytidine), 2-chloro-2'-deoxyadenosine (2CdA), CaFdA (2-chloro-2-ara-fluoro-deoxyadenosine), fludarabine (2-Fluoroadenine 9-beta-D-Arabinofuranoside), 2',3'-dideoxycytidine (ddC), 2',3'-dideoxyadenosine (ddA), 2',3'dideoxyguanosine (ddG), ara-A (adenosine-arabinoside; Vivarabine), ara-C (cytidinearabinoside), ara-G (9-beta-D-arabinofuranosylguanine), aciclovir (9-[2-hydroxy-ethoxy]methyl-guanosine), buciclovir, famciclovir. ganciclovir (9-[2-hvdroxv-1-(hydroxymethyl)ethoxyl-methyl]-guanosine), penciclovir, valciclovir, 3TC (2'-deoxy-3'thiacytidine), dFdG (2',2'-difluorodeoxyguanosine), 2,6-Diamino-ddP (ddDAPR; DAPDDR; 2,6-Diamino-2',3'-dideoxypurine-9-ribofuranoside), 9-(2'-Azido-2',3'-dideoxy-B-Derythropentofuranosyl)adenine (2'-Azido-2',3'-dideoxyadenosine; 2'-N3ddA), 2'-N3ddA(β-Dthreo) (9-(2'-Azido-2',3'-dideoxy-B-D-threopentofuranosyl)adenine), 3'-Az-5-Cl-ddC (3'-Azido-2',3'-dideoxy-5-chlorocytidine), 3'-F-5-Cl-ddC (2',3'-Dideoxy-3'-fluoro-5-chlorocytidine). 3'-FddA (B-D-Erythro) (9-(3'-Fluoro-2',3'-dideoxy-B-D-erythropentafuranosyl)adenine), 3'-FddC (3'-Fluoro-2',3'-dideoxycytidine), 3'-F-ddDAPR (2,6-Diaminopurine-3'-fluoro-2',3'dideoxyriboside), 3'-FddG (3'-Fluoro-2',3'-dideoxyguanosine), 3'-Hydroxymethyl-ddC (2',3'-Dideoxy-3'-hydroxymethyl cytidine; BEA-005), 3'-N3-5-F-ddC (3'-Azido-2',3'-dideoxy-5fluorocytidine), 3'-N3-5-Me-ddC (CS-92; 3'-Azido-2',3'-dideoxy-5-methylcytidine), 3'-N3-ddA (9-(3'-Azido-2'.3'-dideoxy-B-D-erythropentafuranosyl)adenine), 3'-N3-ddC (CS-91; 3'-Azido-2'.3'-dideoxycytidine). 3'-N3ddG (AZG: 3'-Azido-2',3'-dideoxyguanosine). 3'-N3-N4-5-diMeddC (3'-Azido-2',3'-dideoxy-N4--5-dimethylcytidine), 3'-N3-N4-OH-5-Me-ddC (3'-Azido-2',3'dideoxy-N4-OH-5-methylcytidine), 4'-AzdA (4'-Azido-2'-deoxyadenosine), 4'-AzdC (4'-Azido-2'-deoxycytidine), 4'-AzdG (4'-Azido-2'-deoxyguanosine), 5-Et-ddC (2',3'-Dideoxy-5ethylcytidine), 5-F-ddC (5-Fluoro-2',3'-dideoxycytidine), 6Cl-ddP (D2ClP; 6-Chloro-ddP;

CPDDR: 6-Chloro-9-(2,3-dideoxy-.beta.-D-glyceropentofuranosyl)-9H-purine), D2SMeP (9-(2',3'-Dideoxydidehydro-(2.3-Dideoxy-β-D-ribofuranosyl)-6-(methylthio)purine), D4A adenosine), D4C (2',3'-Didehydro-3'-deoxycytidine), D4DAP (2,6-Diaminopurine-2',3'dideoxydidehydroriboside; ddeDAPR), D4FC (D-D4FC; 2',3'-Didehydro-2',3'-dideoxy-5fluorocytidine), D4G (2',3'-Didehydro-2',3'-dideoxyguanosine), DMAPDDR (N-6-dimethyl ddA; 6-Dimethylaminopurine-2',3'-dideoxyriboside), dOTC (-) ((-)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTC (+) ((+)-2'-Deoxy-3'-oxa-4'-thiocytidine), dOTFC (-) ((-)-2'-Deoxy-3'-oxa-4'-thio-5fluorocytidine), dOTFC (+) ((+)-2'-Deoxy-3'-oxa-4'-thio-5-fluorocytidine), DXG ((-)-β-Dioxolane-G), DXC-α-L-(α-L-Dioxalane-C), FTC (Emtricitabine; Coviracil; (-)-FTC; (-)-2',3'-Dideoxy-5-fluoro-3'-thiacytidine), FTC-α-L- (α-L-FTC), L-D4A (L-2',3'-Didehydro-2',3'dideoxyadenosine), L-D4FC (L-2',3'-Didehydro-2',3'-dideoxy-5-fluorocytidine), L-D4I (L-2',3'-Didehydro-2',3'-dideoxyinosine), L-D4G (L-2',3'-Didehydro-2',3'-deoxyguanosine), L-FddC (B-L-5F-ddC), Lodenosine (F-ddA; 2'-FddA (B-D-threo); 2'-F-dd-ara-A; 9-(2'-Fluoro-2',3'-dideoxy-B-D-threopentafuranosyl)adenine), MeAZddIsoC (5-Methyl-3'-azido-2',3'-dideoxyisocytidine), N-6-methyl ddA (N6-Methyl-2',3'-N6-Et-ddA (N-Ethyl-2',3'-dideoxyadenosine), (1-(2',3'-Dideoxy-2'-fluoro-β-D-threodideoxyadenosine) RO31-6840 or pentofuranosyl)cytosine).

28. (Previously Presented) The composition according to claim 1, wherein the at least one nucleoside analogue is selected from the group consisting of D4T, ddC, AZT, ACV, 3TC, ddA Fludarabine, Cladribine, araC, gemcitabine, Clofarabine, Nelarabine (araG), and Ribavirin.

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29. (Previously Presented) The composition according to claim 1, wherein the at least

one nucleoside analogue is gemcitabine or AZT.

30. (Currently Amended) The composition according to claim 1, comprising at least two

nucleoside analogues, such as at least 3 nucleoside analogues, for example at least 4 nucleoside

analogues, such as at least 5 nucleoside analogues.

31. (Currently Amended) The composition according to claim 1, comprising at least

three compounds capable of enhancing gap-junction communication, such as at least 3

compounds, for example at least 4 compounds, such as at least 5 compounds.

32. (Withdrawn) A method of treating cancer comprising administering to a patient in

need thereof a therapeutically effective amount of at least one compound capable of increasing

gap-junction communication, and at least one nucleoside analogue.

33. (Withdrawn) The method of claim 32, further comprising administering a source of

deoxyribonucleoside kinase.

34. (Withdrawn) The method of claim 32, wherein the cancer is a multicellular cancer

type.

35. (Withdrawn) The method of claim 33, wherein the cancer is selected from the group

consisting of glioblastoma, bladder cancer, neuroblastoma, esophageal cancer, tongue cancer,

hepatocellular carcinoma, lung cancer, malignant melanoma, ovarian cancer, prostate cancer, renal cell carcinoma, and breast cancer.

- (Withdrawn) The method of claim 35, wherein the cancer is breast cancer or glioblastoma.
- 37. (Withdrawn) The method of claim 33, wherein the deoxyribonucleoside kinase is administered to the cancer cells using a gene therapy vector.
- 38. (Withdrawn) The method of claim 37, wherein the gene therapy vector is a virus vector selected from the group consisting of Herpes simplex viral vector, adenoviral vector, adenovirus-associated viral vector, lentiviral vector, retroviral vector, and a vacciniaviral vector.
- 39. (Withdrawn) The method of claim 38, wherein the gene therapy vector is administered to the cancer cells by implanting a composition of packaging cells capable of producing an infective virion comprising the viral vector.
- 40. (Withdrawn) The method of claim 39, wherein the packaging cells are encapsulated, and/or wherein the packaging cells are attached to a support matrix.
- 41. (Withdrawn) The method of claim 37, wherein the gene therapy vector is a plasmid vector.

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42. (Withdrawn) The method of claim 41, wherein the plasmid vector is selected from

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the group consisting of general eukaryotic expression vectors, vectors for stable and transient

expression and epitag vectors as well as their TOPO derivatives for fast cloning of desired

inserts.

43. (Withdrawn) The method of claim 33, wherein the thymidine kinase is administered

to the cancer cells by implanting a composition of human stem or precursor/progenitor cells,

comprising a heterologous expression construct capable of expressing said deoxyribonucleoside

kinase, and wherein said human stem cells are capable of forming a tight junction with cells in

the tumour.

44. (Withdrawn) The method of claim 43, wherein said human stem or

precursor/progenitor cells are human neural stem or precursor/progenitor cells.

45. (Withdrawn) The method of claim 32, comprising administration of the composition

of claim 1.

46. (Withdrawn) The method of claim 32, wherein said compound capable of enhancing

gap-junction communication is 4-phenylbutyrate, or a pharmaceutically acceptable salt thereof.

47-57. (Cancelled)

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58. (Withdrawn) A method of augmenting the therapeutic activity of a nucleoside

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analogue based cancer therapy, said method comprising administering to a patient an amount of

at least one compound capable of enhancing gap-junction communication and thereby

augmenting the therapeutic activity of said nucleoside analogue based therapy.

59. (Withdrawn) The method of claim 58, wherein said nucleoside analogue based

therapy further comprises administration of a source of deoxyribonucleoside kinase.

60. (Withdrawn) The method of claim 58, wherein said compound capable of enhancing

gap-junction communication is 4-phenylbutyrate or a pharmaceutically acceptable salt thereof.

61. (Withdrawn) The method of claim 58, comprising administering the composition

according to claim 1.

62. (Currently Amended) Pharmaceutical articles containing at least one nucleoside

analogue. [[and]] at least one compound capable of enhancing gap-junction communication and

a source of deoxyribonucleoside kinase as a combination for the simultaneous, separate or

successive administration in cancer therapy.

63. (Canceled)

64. (Withdrawn) Articles of claim 62, wherein said compound capable of enhancing gap-

junction communication is 4-phenylbutyrate or a pharmaceutically acceptable salt thereof.

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65. (Previously Presented) Articles of claim 62, comprising the composition according to

claim 1.

66. (Original) Articles of claim 62, wherein the cancer is a multicellular cancer type.

67. (Original) Articles of claim 62, wherein the cancer is selected from the group

consisting of glioblastoma, bladder cancer, neuroblastoma, esophageal cancer, tongue cancer,

hepatocellular carcinoma, lung cancer, malignant melanoma, ovarian cancer, prostate cancer,

renal cell carcinoma, and breast cancer.

68. (Original) Articles of claim 62, wherein the cancer is breast cancer or glioblastoma.